How to give executable permission to all Python scripts in Linux?

Asked 6 years ago Modified 1 year, 9 months ago Viewed 10k times

Suppose I have a python script called **a.py** like this:

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4

#!/usr/bin/env python3
-*- coding: utf-8 -*# Author : Bhishan Poudel
Date : Jul 13, 2016

*



Imports

Script
print("hello")

I can run this scripts in two ways:

Using python interpreter:

```
python3 a.py
```

Changing permission

```
chmod a+x a.py; ./a.py
```

QUESTION

How can I run any new or old python scripts without using chmod a+x script_name all the times.

I have root access and user access both to my computer.

Basically i want executable permission to all the .py files, how can we do so?

I tried different shebangs such as:

```
#!/usr/bin/python3
#!/usr/bin/env python3
#!/usr/local/bin/python3
#!/usr/local/bin/env python3
```

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The python interpreter is also in the \$PATH. The output of echo \$PATH is following:

```
/Library/Frameworks/Python.framework/Versions/2.7/bin:/Library/Frameworks
/Python.framework/Versions/3.5/bin:/usr/bin:/bin:/usr/sbin:/usr/local
/bin:/opt/X11/bin:/usr/texbin:/Library/Frameworks/Python.framework/Versions
/2.7/bin:/Library/Frameworks/Python.framework/Versions/3.5/bin:/opt/local
/bin:/Users/poudel/phosim:/Users/poudel/Applications:/usr/local/octave/3.8.0
/bin:/Users/poudel/Applications/Geany.app/Contents/MacOS/:/opt/local/bin:/Users
/poudel/phosim:/Users/poudel/Applications:/usr/local/octave/3.8.0
/bin:/Applications/Geany.app/Contents/MacOS/:/opt/local/bin:/Users/poudel
/phosim:/Users/poudel/Applications:/usr/local/octave/3.8.0/bin:/Applications
/Geany.app/Contents/MacOS/
```

Also, Is /usr/bin/py* has:

```
/usr/bin/pydoc*
                           /usr/bin/python2.5@
                                                      /usr/bin/pythonw*
/usr/bin/pydoc2.5@
                           /usr/bin/python2.5-config@ /usr/bin/pythonw2.5@
/usr/bin/pydoc2.6@
                           /usr/bin/python2.6@
                                                      /usr/bin/pythonw2.6@
/usr/bin/pydoc2.7@
                           /usr/bin/python2.6-config@ /usr/bin/pythonw2.7@
/usr/bin/python*
                           /usr/bin/python2.7@
/usr/bin/python-config*
                           /usr/bin/python2.7-config@
```

Related links:

http://effbot.org/pyfaq/how-do-i-make-a-python-script-executable-on-unix.htm

Permission Denied when executing python file in linux

bash permission denied for python

Permission denied when launch python script via bash

python bash path executable chmod

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edited Oct 3, 2019 at 9:12

asked Jul 13, 2016 at 15:23 BhishanPoudel

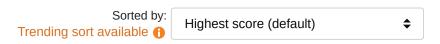
376 822

bash - How to give executable permission to all Python scripts in Linux? - ... https://stackoverflow.com/questions/38355791/how-to-give-executable-per...

You probably *dont* want all .py files to be executable; modules that aren't intended to be run as scripts should not have their executable bit set (or at least, there is no reason to set it). – chepner Jul 13, 2016 at 15:40

@chepner, I appreciate your idea, but i wanted to run files without using chmod a+x script_name.py all the time for all the files. For future reference, I will consider your idea too. Thanks. – BhishanPoudel Jul 13, 2016 at 15:53

4 Answers



```
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```



The hard way



Run below with root privilege:



```
find /your/path/ -type f -name "*.py" -exec chmod u+x {} \;
```



Note:



chmod need not be run as root if you're the owner of .py file.

The smart way

Write a script to take care of this.

```
#!/bin/bash
if [ -f "$1" ]
then
geany "$1" # You could also use xdg-open if you set geany to open .py files
else
cp /path/to/python/startup/template "$1" # You may omit this if you don't have a
default template
chmod u+x "$1"
geany "$1"
fi
```

Save the script as, say, pycreator in say /usr/bin/, then do

```
chown root:root /usr/bin/pycreator
chmod +x-w /usr/bin/pycreator
```

To create a new script using pycreator, do

```
pycreator calculator.py
```

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Also [this] answer pointed to by @choroba in his comment provides valuable insight in this regard.

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edited May 23, 2017 at 11:46

Community Bot

1 1

answered Jul 13, 2016 at 15:25



3 Also, configure your editor to add the execution flag for future .py files created. – choroba Jul 13, 2016 at 15:31

@choroba : I like this answer, but is it possible to configure an editor say vi to automatically add +x while saving a file with particular extension say .sh?—Мона Сах Jul 13, 2016 at 16:40 /



Using the idea of @sjsam, I did following:

3 Suppose I have a file hello.py in any location.



```
cd to that location
find $PWD -type f -name "*.py" -exec chmod u+x {} \;
./hello.py

# Now, i can create any number of .py files in that folder and run ./filename

# Note: if we are running as user permission, and also have sudo access,
   we can also do:
    sudo -H find $PWD -type f -name "*.py" -exec chmod u+x {} \;
We should not use sudo unless absolutely necessary.
```

Thanks to sjsam.

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edited Jul 13, 2016 at 15:54

answered Jul 13, 2016 at 15:39



Just type this command in terminal.

0 sudo su

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answered Nov 18, 2017 at 6:06



jakir hussain **306** 2 18



Try this chmod +x *.py it works on my PC(OS:Ubuntu 20.4), Also i am using #! /usr/bin/env python3 shebang

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answered Oct 10, 2020 at 6:42



WasitShafi

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45